

Template-Based Teacher Web Pages

Scaffolding teacher technology skills
through the use of easy-to-use
Web templates.

In fall 2002, my school district, the Brewster Central School District introduced teacher Web pages to a teaching staff of more than 300. Brewster is located 50 miles north of New York City and has a student population of more than 3,600 in five schools. It is on the fringe of affluent Westchester County. The district Web site, <http://www.brewsterschools.org/>, is the heart of our project.

One of the major goals of the project was to improve teacher computer literacy. Approximately one year prior to this project, the professional staff was asked by the district technology committee to complete a technology survey so the district could assess the state of technology skills and integration and gather baseline data on teachers' and administrators' technology skills.

The survey explored staff attitudes and perceptions in four areas:

- General informational questions
- General technology skills
- Attitudes toward technology use
- Specific questions about technology use and curriculum integration

In general, the survey showed overwhelmingly positive attitudes toward technology. The vast majority believed that technology will help improve education and would like to have the opportunity to improve their skills.

However, the survey provided evidence that many computers in the district were being underused because teachers simply did not have the computer skills needed to implement technology with their students.

The teacher Web page project provided a vehicle for teachers to improve their computer skills within

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Subject: Web page creation

Grades: All

Technology: All

the context of a specific application. Training teachers on creating and maintaining template-based Web pages allowed us to address many technology skills including:

- General technology skills
- Tool/productivity software skills
- Internet/information research skills
- Graphics/presentation/multimedia skills

This proved to be a successful way to train all of the teachers during one school year. Another benefit of the project was increased communication with the community. Teachers could post information on their Web sites about their programs and activities, curriculum, grading policies, daily homework assignments, special events, and more.

Getting Started

The first step in our process was to select the most appropriate product for our district. We wanted the product to be completely Web based, accessible from both inside and outside the district. We looked at options to host the pages ourselves or use an outside hosting service. Hosting the server in-house required the purchase of hardware and network software, installation, and ongoing maintenance fees. The cost of a shared hosting service ranged from \$50–\$250 per month, depending on the amount of space and bandwidth needed. All of the required hardware and software is provided, and in most cases, the systems are constantly monitored. Many Web page creation products build hosting fees into their price structure. We ultimately decided to have the application hosted outside the district.

The second requirement for our district was to have a Web page tool that would be easy to learn and use, and one that did not require the teachers to learn HTML. We wanted

to make sure that the emphasis was on the content of the Web pages and the frequency of updates. The program our district ultimately selected (os4e) is simple to learn and allows teachers to post almost any type of information. (*Editor's note:* For a list of providers, see the Resources section on p. 43.) The product includes several predefined sections for teachers to fill in, including:

- What's New
- Special Pages
- Calendar
- Classes and Assignments
- References (including Web links and uploaded documents)

Additional sections were added where teachers could create technology-based lessons, such as WebQuests and other types of Internet and technology-based lessons.

Implementation

Once we selected a product, we created a section on the district Web site where the Web pages could be easily accessed by teachers, students, and parents. We created accounts for all teachers and sent them hard copies of their login information and passwords in sealed envelopes. We also set up training sessions at the beginning of the year in every building.

Every teacher was given time to create an initial Web site, containing several paragraphs of text that included a teacher introduction, a description of their program, and one upcoming event to put on their calendar. Trainers presented teachers with an overview of the program and a sample Web site that they could get ideas from. District staff developed manuals and instructions and placed them on the Web site for easy access. We grouped the initial training classes by school and then by grade level and/or departments. Principals

arranged class coverage for teachers to attend the 90-minute sessions. Because existing teacher computer skills varied widely, some classes could not cover as much as we had hoped. We were careful to give additional time to teachers who needed more attention, because computer literacy was one of the major goals of this project.

Several issues arose during the initial introduction. Teachers wanted to know what the expectations of the Web page project were. How often should the pages be updated? How much content has to be posted? Would they be evaluated on their Web page? How would this tie in with end of the year ratings? And finally, where would teachers find the time to do this?

The district leadership team devised an implementation strategy to encourage the use of the Web pages and to address teacher concerns. It is critical to have a consistent approach and similar expectations for teachers from building to building, or equity problems can develop. The district leadership collectively decided to encourage all teachers to develop a Web page, with the goal of updating them once a month. Teachers were encouraged to update their pages, but not penalized for not doing so. Additional time and training were given for teachers needing assistance. Specialist teachers were grouped together to work together on common approaches. Time was provided throughout the year to update pages. Some buildings started monthly Web page breakfast meetings (with plenty of refreshments)! After-school sessions were held in other buildings.

Getting All Teachers on Board

When working with large numbers of teachers on a project of this scale, there will be challenges. Not all teachers will be on board with this process.

<i>Skill</i>	<i>Before Training</i>	<i>After Training</i>
I can open documents in a number of different applications and save them to different locations.	69%	81%
I use multimedia in the classroom or in other professional presentations.	36%	47%
I can use a digital camera to take pictures and preview the pictures on a computer.	34%	49%
I feel comfortable using a search engine such as Yahoo to find information on the Internet.	85%	97%
I can copy a graphic from an Internet site and place it into another document.	43%	60%
I am comfortable using e-mail, and I send and receive e-mail attachments.	76%	94%
I have learned how to teach in new ways as a result of technology.	72%	83%
I am comfortable helping other colleagues with computer-related technology.	51%	70%
I encourage students to work collaboratively on technology-based activities.	37%	52%

Figure 1. Sample data from our teacher technology survey.

As expected, a percentage of our staff did not embrace the project. The good news is that this percentage decreased as the project moved forward, and as we demonstrated that Web pages have solid curricular connections and application to instruction.

Recently, I discussed the project with a seasoned, bright, technology-literate teacher who had minimal interest in maintaining a Web page. I wanted to understand why this project had little or no relevance for this teacher, what we missed, and what we could improve on.

"It could be a good tool for some teachers, but I communicate with my students' parents directly, and I have other ways of helping kids. With limited time, my prep periods are spent

helping students, and this is not high on my priority list. Where am I going to find the time? If you could show me how this could help my students, perhaps I would be willing to consider it," was the teacher's response.

This feedback demonstrated to me that the initial message and purpose of the project translated quite differently when it filtered down to this teacher's level. Unfortunately, this teacher considered it another burden and expectation. It was clear that we needed to demonstrate how Web pages could fit in to existing programs and be relevant to teachers. After similar feedback from other teachers we retooled our training sessions to make more solid curricular connections, concentrating not only on the

"buttons" but also on the purpose and relevance of teacher Web pages.

A Link to Instruction

A critical aspect of the success of our project was demonstrating the instructional relevance of this tool to our teaching staff. Many of our training sessions addressed how the teacher Web page tool could integrate technology in the classroom. Teachers began to use the Web page to enhance instruction in a wide variety of ways. First, teachers started posting resources relevant to their classes and discovered that they could upload any type of file to their Web page, including documents (word processing, spreadsheet, presentation), images (JPEG, GIF), and videos (MPEG). Many teachers thought up very creative uses for this tool. Given the ability to post any type of file to their Web page, teachers could create and share lessons with students easily. The teacher Web page evolved as the cornerstone of the district's technology integration strategy.

Several months down the line, the district added a lesson plan module to the Web page product. The lesson plan module has a template to create WebQuests, but lessons can be modified for any kind of lesson. Teachers learned how to use this tool to create varied types of technology experiences for their classes in subsequent training sessions. We store these lessons in a central database on the main district Web site. Teachers can access this site and search lessons by grade, topic, and keywords.

Assessment

We gave a second technology survey to the professional staff eight months into the project. The survey was identical to the one taken a year prior. Staff members completed the 34-question survey on technology skills, attitudes, and technology integration. It was important for the district to

measure our overall progress in the staff development program.

In general, the comparison of the two years of survey data shows significant growth in how technology is being used in the district, and in teacher's technology skills. We attribute this growth directly to the teacher Web page project. Sample results are shown in Figure 1. The complete survey is located on the district Web page, at <http://www.brewsterschools.org/>.

Next Steps

The district's teachers continue to amaze me with their imagination, creativity, and diligence with their Web pages. After several months of additional training, teachers began to update their pages on a more regular basis. It was very exciting for me to see the evolution of these Web sites. Even more gratifying is seeing teachers with moderate technology skills

making interesting and attractive Web sites that contain meaningful and high-quality content.

Teachers use their Web pages for many different purposes. The Web sites have helped many of our teachers use technology to improve instruction. The increase of teacher technology skills allowed teachers to move to a deeper and more sophisticated level of technology integration. This year, the district started the next phase of the technology professional development program, using technology to enhance existing curriculum. Teachers are receptive to and comfortable with these concepts, because most of them now have the requisite skills and insight to work in this medium with their students. The instructional benefits cannot be understated. The Web sites have become a springboard for many technology activities, containing rich collections of lessons, links,

and other materials that will enhance instruction in Brewster for many years to come.

Resources

30 Minute Web sites for Teachers: <http://www.os4e.com>

Class Compass: <http://www.classcompass.com/>

Echalk: <http://www.echalk.com/>

Inet Teacher: <http://www.inetteacher.com/>



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he is currently the director of technology in Brewster, New York, and has been a contributor for eSchool News, Learning & Leading with Technology, T.H.E. Journal, and Technology and Learning magazine, where he was recently named a semi-finalist for 2003 Ed Tech Leader of the year. He has worked as a corporate trainer with Fortune 500 corporations, owned a local area networking business, and has been a certified network engineer.